NCRMP Socioeconomic Monitoring for South Florida FY19

Presented By:
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NOAA Coral Reef Conservation Program & National Centers for Coastal Ocean Science

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Project Team

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- Jurisdictional management agencies
- Key jurisdictional stakeholders
Outline

1. Background on the National Coral Reef Monitoring Program’s Socioeconomic Component
2. Survey methodology for South Florida *
3. Results: Summary Findings *
5. Key Takeaways *
6. Next Steps
7. Discussion/Q&A (*brief opportunities for questions)
National Coral Reef Monitoring Program

- Biological Indicators
- Climate Indicators
- Socioeconomic Indicators
Socioeconomic Component:
Examples of the types of data we collect

- Use of coral reef resources
- Population change
- Knowledge, attitudes, & perceptions of coral reefs and coral reef management
MONITORING METHODOLOGY
Indicators for NCRMP Social Monitoring

- Participation in reef activities
- Perceived resource condition
- Attitudes towards coral reef management strategies
- Awareness and knowledge of coral reefs
- Human population changes near coral reefs
- Economic impact of coral reef fishing to jurisdiction
- Economic impact of dive/snorkel tourism to jurisdiction
- Community well-being
- Cultural importance of reefs
- Participation in behaviors that may improve coral reef health
- Physical infrastructure
- Awareness of coral reef rules and regulations
- Governance
## Social Monitoring by Geography and Year

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>Inhabited Islands/Counties in Direct Proximity to Coral Reefs</th>
<th>First Monitoring Cycle</th>
<th>Second Monitoring Cycle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Florida</td>
<td>Martin, Palm Beach, Broward, Miami-Dade, and Monroe Counties</td>
<td>2014</td>
<td>2019</td>
</tr>
<tr>
<td>American Samoa</td>
<td>Islands of Tutuila, Ta’u, Olosega, Ofu, and Aunu’u</td>
<td>2014</td>
<td>2021</td>
</tr>
<tr>
<td>Hawai’i</td>
<td>Islands of Kauai, Maui, Moloka’i, O’ahu, Hawai’i, and Lana’i</td>
<td>2015</td>
<td>2020</td>
</tr>
<tr>
<td>Guam</td>
<td>Island of Guam</td>
<td>2016</td>
<td>2023</td>
</tr>
<tr>
<td>CNMI</td>
<td>Islands of Saipan, Tinian and Rota</td>
<td>2016-2017</td>
<td>2024</td>
</tr>
<tr>
<td>USVI</td>
<td>Islands of St. Croix, St. Thomas, and St. John</td>
<td>2017</td>
<td>2025</td>
</tr>
</tbody>
</table>
Survey Methodology

- Core module vs. jurisdiction specific module:
  - Standard set of questions allows for comparisons across jurisdictions
  - Jurisdiction specific questions allows for local management and resource issues to be addressed

- Survey sample:
  - Random sample of adult residents in South Florida counties
  - Representative of population demographics (age, race, sex, income)

- Survey implementation:
  - April-Aug 2019
  - Administered via telephone (cell phone/landline) in English and Spanish
  - Total # of completed surveys = 2,201
2019 MONITORING RESULTS
Respondent Demographics
## Respondent Demographics

<table>
<thead>
<tr>
<th>Demographic Variables (RR = Response rate percent)</th>
<th>Population</th>
<th>Weighted Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>County of Residence (RR = 100)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Miami-Dade</td>
<td>43.2</td>
<td>43.2</td>
</tr>
<tr>
<td>Broward</td>
<td>29.8</td>
<td>29.8</td>
</tr>
<tr>
<td>Palm Beach</td>
<td>23.1</td>
<td>23.1</td>
</tr>
<tr>
<td>Martin</td>
<td>2.6</td>
<td>2.6</td>
</tr>
<tr>
<td>Monroe</td>
<td>1.3</td>
<td>1.3</td>
</tr>
<tr>
<td><strong>Gender (RR = 98.2)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>52.0</td>
<td>51.9</td>
</tr>
<tr>
<td><strong>Race (RR = 90.6)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>73.1</td>
<td>67.9</td>
</tr>
<tr>
<td>Black or African American</td>
<td>21.3</td>
<td>11.8</td>
</tr>
<tr>
<td>Other</td>
<td>5.7</td>
<td>20.3</td>
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<tr>
<td><strong>Ethnicity (RR = 95.1)</strong></td>
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<td></td>
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<tr>
<td>Hispanic</td>
<td>43.4</td>
<td>45.1</td>
</tr>
<tr>
<td><strong>Age (RR = 92.1)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-24</td>
<td>10.6</td>
<td>11.1</td>
</tr>
<tr>
<td>25-34</td>
<td>16.7</td>
<td>16.7</td>
</tr>
<tr>
<td>35-44</td>
<td>16.6</td>
<td>17.1</td>
</tr>
<tr>
<td>45-54</td>
<td>18.3</td>
<td>17.9</td>
</tr>
<tr>
<td>55-64</td>
<td>15.7</td>
<td>16.1</td>
</tr>
<tr>
<td>65+</td>
<td>22.1</td>
<td>21.1</td>
</tr>
<tr>
<td><strong>Education (RR = 94.2)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than high school</td>
<td>14.8</td>
<td>2.1</td>
</tr>
<tr>
<td>High school graduate</td>
<td>27.3</td>
<td>13.7</td>
</tr>
<tr>
<td>Some college, community college, or associate’s degree</td>
<td>29.5</td>
<td>25.4</td>
</tr>
<tr>
<td>Bachelor’s degree or higher</td>
<td>28.4</td>
<td>58.8</td>
</tr>
</tbody>
</table>
Respondents’ Marine Professions

- Other Watersports: 0.2%
- Eco-Tour Operation: 1.6%
- Ocean/Coastal Management: 2.2%
- Artisan: 3.0%
- Ecological Research: 3.9%
- Charter Fishing: 4.0%
- Commercial Fishing: 5.5%
- Dive/Snorkel Operation: 6.2%
- Education: 8.7%
- Marine/Boat Operation: 13.2%
- Other: 51.5%
Participation in Coral Reef Activities

- Spear Fishing: 92.7% Never, 4.5% Once a Month or Less, 1.2% 2-3 Times a Month, 1.6% 4 Times a Month or More
- Gathering of Marine Resources: 88.0% Never, 8.5% Once a Month or Less, 2.2% 2-3 Times a Month, 1.4% 4 Times a Month or More
- Free Diving: 87.5% Never, 8.4% Once a Month or Less, 1.6% 2-3 Times a Month, 2.5% 4 Times a Month or More
- SCUBA Diving: 87.1% Never, 9.0% Once a Month or Less, 2.0% 2-3 Times a Month, 1.8% 4 Times a Month or More
- Waterside Camping: 77.3% Never, 17.7% Once a Month or Less, 3.0% 2-3 Times a Month, 2.0% 4 Times a Month or More
- Hook and Line Fishing: 70.6% Never, 15.8% Once a Month or Less, 7.1% 2-3 Times a Month, 6.6% 4 Times a Month or More
- Island or Sandbar Recreation: 66.7% Never, 22.3% Once a Month or Less, 6.9% 2-3 Times a Month, 4.1% 4 Times a Month or More
- Snorkeling: 66.0% Never, 23.2% Once a Month or Less, 6.3% 2-3 Times a Month, 4.5% 4 Times a Month or More
- Watersports: 65.8% Never, 22.0% Once a Month or Less, 7.2% 2-3 Times a Month, 5.0% 4 Times a Month or More
- Boating: 56.8% Never, 24.0% Once a Month or Less, 9.1% 2-3 Times a Month, 10.1% 4 Times a Month or More
- Swimming or Wading: 34.2% Never, 29.9% Once a Month or Less, 16.7% 2-3 Times a Month, 19.2% 4 Times a Month or More
- Beach Recreation: 31.8% Never, 33.3% Once a Month or Less, 20.4% 2-3 Times a Month, 14.6% 4 Times a Month or More
Motivations to Fish or Gather Marine Resources

- **To Sell**: 94.6% never, 1.5% rarely, 2.1% sometimes, 1.8% frequently.
- **For Sport, for example, Tournament Fishing**: 66.1% never, 15.9% rarely, 11.3% sometimes, 6.8% frequently.
- **For Special Occasions and Cultural Events**: 58.8% never, 20.8% rarely, 13.7% sometimes, 6.7% frequently.
- **To Give to Extended Family Members and/or Friends**: 46.9% never, 19.3% rarely, 22.1% sometimes, 11.7% frequently.
- **To Feed Myself and My Family or Household**: 30.9% never, 21.1% rarely, 23.2% sometimes, 24.9% frequently.
- **For Fun**: 12.7% never, 16.5% rarely, 26.4% sometimes, 44.4% frequently.
Importance of Coral Reefs to Cultural Beliefs and Values

- Very Unimportant/Unimportant: 11.2%
- Neither Unimportant nor Important: 11.9%
- Important/Very Important: 76.9%
Frequency of Fish/Seafood Consumption among Households

- Never: 2.6%
- Less than Once a Month: 8.5%
- 1 to 3 Times a Month: 24.3%
- About Once a Week: 30.1%
- A Few Times a Week: 31.3%
- Every Day: 3.2%
Consumption of Fish/Seafood from Local Coral Reefs

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percentage of Residents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>33.9%</td>
</tr>
<tr>
<td>Less than Once a Month</td>
<td>24.1%</td>
</tr>
<tr>
<td>1 to 3 Times a Month</td>
<td>20.2%</td>
</tr>
<tr>
<td>About Once a Week</td>
<td>14.1%</td>
</tr>
<tr>
<td>A Few Times a Week</td>
<td>7.0%</td>
</tr>
<tr>
<td>Every Day</td>
<td>0.6%</td>
</tr>
</tbody>
</table>
Primary Sources of Seafood

- Purchased by Myself or Someone in My Household at a Store or Restaurant: 77.2%
- Purchased by Myself or Someone in My Household at a Market or Roadside Vendor: 41.6%
- Caught by Myself or Someone in My Household: 17.8%
- Caught by Friends or Neighbors: 8.9%
- Caught by Extended Family Members: 6.0%
Perceptions of Change in Resource Conditions Over the Last 10 Years

<table>
<thead>
<tr>
<th>Resource Quality</th>
<th>A Lot Worse/Worse</th>
<th>No Change</th>
<th>Better/A Lot Worse</th>
<th>Not Sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beach Quality</td>
<td>54.0%</td>
<td>25.0%</td>
<td>13.9%</td>
<td>7.1%</td>
</tr>
<tr>
<td>Coral Amount</td>
<td>56.1%</td>
<td>11.2%</td>
<td>4.6%</td>
<td>28.1%</td>
</tr>
<tr>
<td>Fish Number</td>
<td>54.8%</td>
<td>16.7%</td>
<td>5.0%</td>
<td>23.5%</td>
</tr>
<tr>
<td>Fish Size</td>
<td>43.1%</td>
<td>22.5%</td>
<td>4.9%</td>
<td>29.5%</td>
</tr>
<tr>
<td>Mangroves Quality</td>
<td>34.1%</td>
<td>29.2%</td>
<td>11.1%</td>
<td>25.6%</td>
</tr>
<tr>
<td>Ocean Quality</td>
<td>62.3%</td>
<td>22.0%</td>
<td>6.6%</td>
<td>9.0%</td>
</tr>
<tr>
<td>Seagrass Quality</td>
<td>44.3%</td>
<td>21.5%</td>
<td>7.4%</td>
<td>26.8%</td>
</tr>
</tbody>
</table>
Perceptions of Anticipated Change in Resource Conditions Over the Next 10 Years

- Get Worse: 62.8%
- Stay the Same: 10.7%
- Improve: 20.8%
- Not Sure: 5.7%
Agreement with Statements on the Value of Coral Reefs

- Coral Reefs are Important to South Florida’s Culture: 91.6%
- Healthy Coral Reefs Attract Tourists to South Florida: 88.7%
- Coral Reefs Provide Economic Opportunities to Coastal Communities: 85.7%
- Coral Reefs in Good Condition Provide Food for Coastal Communities to Eat: 82.9%
- Coral Reefs Protect South Florida from Erosion and Natural Disasters: 81.6%
- Coral Reefs are Only Important to Fisherman, Divers, and Snorkelers: 8.2%
Familiarity with Threats Facing Coral Reefs

- Hurricanes and Other Natural Disasters: 11.2% unfamiliar, 88.8% familiar
- Pollution: 11.7% unfamiliar, 88.3% familiar
- Climate Change: 14.2% unfamiliar, 85.8% familiar
- Coastal or Urban Development: 23.0% unfamiliar, 77.0% familiar
- Sea Level Rise: 24.8% unfamiliar, 75.2% familiar
- Increasing Ocean Temperatures: 25.0% unfamiliar, 75.0% familiar
- Damage from Ships and Boats: 30.6% unfamiliar, 69.4% familiar
- Too Much Fishing and Gathering: 33.0% unfamiliar, 67.0% familiar
- Invasive Species: 35.7% unfamiliar, 64.3% familiar
- Snorkeling and Diving: 39.5% unfamiliar, 60.5% familiar
- Coral Bleaching: 45.1% unfamiliar, 54.9% familiar
- Coral Disease Threat: 48.8% unfamiliar, 51.2% familiar
- Fishing Prohibited Species: 49.7% unfamiliar, 50.3% familiar
- Ocean Acidification: 54.5% unfamiliar, 45.5% familiar
Agreement with Statements about MPAs

- **MPAs Help Protect Coral Reefs**:
  - Strongly Disagree/Disagree: 3.3%
  - Neither Disagree nor Agree: 4.3%
  - Agree/Strongly Agree: 88.1%
  - Not Sure: 4.3%

- **I Generally Support the Establishment of MPAs**:
  - Strongly Disagree/Disagree: 4.2%
  - Neither Disagree nor Agree: 7.3%
  - Agree/Strongly Agree: 85.4%
  - Not Sure: 3.1%

- **MPAs Increase the Number of Fish**:
  - Strongly Disagree/Disagree: 4.8%
  - Neither Disagree nor Agree: 9.2%
  - Agree/Strongly Agree: 79.9%
  - Not Sure: 6.1%

- **There should be More MPAs in South Florida**:
  - Strongly Disagree/Disagree: 6.8%
  - Neither Disagree nor Agree: 11.5%
  - Agree/Strongly Agree: 76.5%
  - Not Sure: 5.2%

- **There has been an Economic Benefit from the Establishment of MPAs**:
  - Strongly Disagree/Disagree: 7.0%
  - Neither Disagree nor Agree: 13.4%
  - Agree/Strongly Agree: 69.3%
  - Not Sure: 10.3%

- **MPAs Help Increase Tourism**:
  - Strongly Disagree/Disagree: 9.7%
  - Neither Disagree nor Agree: 12.5%
  - Agree/Strongly Agree: 68.3%
  - Not Sure: 9.4%

- **Fishermen’s Livelihoods have been Negatively Impacted from the Establishment of MPAs**:
  - Strongly Disagree/Disagree: 41.8%
  - Neither Disagree nor Agree: 17.9%
  - Agree/Strongly Agree: 27.9%
  - Not Sure: 12.4%
Support for Management Strategies

1. Stricter Control of Sources of Pollution to Preserve Water Quality: 95.3%
2. Efforts to Restore Damaged Coral Reefs: 95.0%
3. Better Regulation of Industrial and Agricultural Pollution into Coastal Waters: 93.2%
4. Increased Public Education on Sea Level Rise and Climate Change: 90.0%
5. Limits Per Person for Certain Fish Species, such as Size or Quantity Limits: 87.6%
Familiarity with Coral Reef Management Organizations

- Florida Fish and Wildlife Conservation Commission: 78.4%
- Florida Department of Environmental Protection: 77.3%
- Florida Keys National Marine Sanctuary (FKNMS): 53.1%
- Southeast Florida Coral Reef Initiative (SEFCRI): 19.1%
- Southeast Florida Action Network (SEAFAN): 14.9%
- Our Florida Reefs Community Planning Process: 14.2%
- Gulf of Mexico and South Atlantic Fishery Management Council: 12.8%
Participation in Activities that Help Protect the Environment

- Recycling: 86.3% Not at All, 6.0% Once a Year or Less, 9.0% Several Times a Month or More
- Coastal or Beach Cleanup: 44.8% Not at All, 23.3% Once a Year or Less, 15.9% Several Times a Month or More, 7.0% At Least Once a Month, 9.1% Several Times a Year
- Donating to Environmental Causes: 48.3% Not at All, 27.6% Once a Year or Less, 15.8% Several Times a Month or More, 6.4% At Least Once a Month
- Volunteering with Environmental Groups: 61.5% Not at All, 19.3% Once a Year or Less, 9.6% Several Times a Month or More, 6.6% At Least Once a Year
- Lionfish Derbies: 93.6% Not at All, 1.0% Once a Year or Less, 0.1% Several Times a Month or More, 0.0% At Least Once a Month
### Top Sources for Information about Coral Reefs and the Environment

<table>
<thead>
<tr>
<th>Source</th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Frequently</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online News Sources or Websites</td>
<td>18.7%</td>
<td>10.5%</td>
<td>22.3%</td>
<td>48.6%</td>
</tr>
<tr>
<td>TV</td>
<td>22.5%</td>
<td>18.1%</td>
<td>29.4%</td>
<td>29.9%</td>
</tr>
<tr>
<td>Friends and Family</td>
<td>25.9%</td>
<td>19.6%</td>
<td>29.1%</td>
<td>25.4%</td>
</tr>
<tr>
<td>Federal Government Agencies</td>
<td>27.9%</td>
<td>17.6%</td>
<td>31.1%</td>
<td>23.4%</td>
</tr>
<tr>
<td>Newspapers</td>
<td>34.3%</td>
<td>19.1%</td>
<td>23.3%</td>
<td>23.4%</td>
</tr>
<tr>
<td>Social Media</td>
<td>35.4%</td>
<td>13.9%</td>
<td>24.0%</td>
<td>26.7%</td>
</tr>
<tr>
<td>Non-profit Organizations</td>
<td>36.8%</td>
<td>19.5%</td>
<td>25.0%</td>
<td>18.7%</td>
</tr>
<tr>
<td>Florida State Government</td>
<td>38.5%</td>
<td>25.4%</td>
<td>24.7%</td>
<td>11.4%</td>
</tr>
<tr>
<td>Radio</td>
<td>40.7%</td>
<td>19.3%</td>
<td>23.5%</td>
<td>16.5%</td>
</tr>
<tr>
<td>Community Leaders</td>
<td>47.4%</td>
<td>22.0%</td>
<td>20.3%</td>
<td>10.3%</td>
</tr>
</tbody>
</table>

The chart above shows the percentage of residents who never, rarely, sometimes, or frequently use different sources to get information about coral reefs and the environment.
Trends between 2014 and 2019 Data
Comparison of Participation in Coral Reef Activities in 2014 and 2019

- Beach Recreation: 68.0% (2014) vs 68.2% (2019)
- Boating: 40.3% (2014) vs 43.2% (2019)
- Diving: 18.8% (2014) vs 18.1% (2019)
- Fishing: 25.7% (2014) vs 30.4% (2019)
- Island or Sandbar Recreation: 26.5% (2014) vs 33.7% (2019)
- Snorkeling: 29.4% (2014) vs 34.0% (2019)
- Swimming or Wading: 62.2% (2014) vs 65.8% (2019)
- Waterside Camping: 20.2% (2014) vs 22.7% (2019)
- Watersports: 25.8% (2014) vs 34.2% (2019)

** indicates p < .05, *** indicates p < .01
Motivations for Fishing/Gathering

To Sell
- 2014: 90.7%
- 2019: 94.6%

For Sport or Tournament
- 2014: 87.0%
- 2019: 66.1%

For Special Occasions and Cultural Events
- 2014: 66.2%
- 2019: 58.8%

To Give to Extended Family Members and/or Friends
- 2014: 14.2%
- 2019: 11.7%

To Feed Myself and My Family or Household
- 2014: 27.1%
- 2019: 24.9%

For Fun
- 2014: 41.7%
- 2019: 44.4%

Legend: Never | Rarely | Sometimes | Frequently
Perceptions of Current Resource Conditions

More respondents perceived these as being in “bad” condition” in 2019

Worst conditions
Perceptions of Change in Resource Conditions

The diagrams show the percentage of residents' perceptions of change in different resource conditions from 2014 to 2019. The categories are:

- A Lot Worse
- Somewhat Worse
- No Change
- Somewhat Better
- A Lot Better
- Not Sure

The data is presented for Beach Quality, Mangroves Quality, Ocean Quality, Coral Amount, and Fish Number.
Perceptions of Anticipated Change in Resource Condition Over the Next 10 Years

The chart shows the percentage of residents anticipating different changes in resource condition over the next 10 years, comparing 2014 and 2019 data:

- **Get Worse**:
  - 2014: 51.5%
  - 2019: 62.8%
- **Stay the Same**:
  - 2014: 14.7%
  - 2019: 10.7%
- **Improve**:
  - 2014: 24.7%
  - 2019: 20.8%
- **Not Sure**:
  - 2014: 9.2%
  - 2019: 5.7%

**indicates $p < .05$, ***indicates $p < .01$
Familiarity with Threats Facing Coral Reefs

- Climate Change: 78.7% (2014) vs 85.8% (2019)
- Coastal or Urban Development: 78.4% (2014) vs 77.0% (2019)
- Coral Bleaching: 44.1% (2014) vs 54.9% (2019)
- Damage from Ships and Boats: 76.0% (2014) vs 69.4% (2019)
- Hurricanes: 88.2% (2014) vs 88.8% (2019)
- Invasive Species: 67.8% (2014) vs 64.3% (2019)
- Pollution: 89.7% (2014) vs 88.3% (2019)
- Snorkeling and Diving: 60.2% (2014) vs 60.5% (2019)
- Too Much Fishing and Gathering: 63.3% (2014) vs 67.0% (2019)

** indicates p < .05, *** indicates p < .01
Familiarity with Coral Reef Management Organizations

- Southeast Florida Coral Reef Initiative: 22.8% (2014), 19.1% (2019)
- Florida Keys National Marine Sanctuary: 58.2% (2014), 53.1% (2019)
- Florida Department of Environmental Protection: 71.2% (2014), 77.3% (2019)
- Florida Fish and Wildlife Conservation Commission: 74.6% (2014), 78.4% (2019)

** indicates p < .05, *** indicates p < .01
Agreement with Statements on the Value of Coral Reefs

1. Coral Reefs are Only Important to Fishermen, Divers, and Snorkelers
   - 2014: 5.8% Strongly Disagree, 47.0% Disagree, 38.2% Neither Disagree nor Agree
   - 2019: 6.3% Strongly Disagree, 37.0% Disagree, 50.6% Neither Disagree nor Agree

2. Healthy Coral Reefs Attract Tourists to South Florida
   - 2014: 38.2% Agree, 49.9% Strongly Agree, 12.8% Not Sure
   - 2019: 42.0% Agree, 46.7% Strongly Agree, 11.3% Not Sure

3. Coral Reefs Protect South Florida from Erosion and Natural Disasters
   - 2014: 8.6% Strongly Disagree, 37.0% Disagree, 43.9% Neither Disagree nor Agree
   - 2019: 8.2% Strongly Disagree, 44.7% Disagree, 36.9% Neither Disagree nor Agree

4. Coral Reefs are Important to South Florida's Culture
   - 2014: 40.9% Agree, 48.2% Strongly Agree, 10.9% Not Sure
   - 2019: 52.8% Agree, 38.8% Strongly Agree, 8.4% Not Sure
Key Takeaways and Next Steps
Key Takeaways

- Top 3 activities: beach recreation, swimming and boating.
  - In 2019, significant increase in fishing, snorkeling, island/sandbar recreation, and watersports in general.
- Monroe County residents were more active in coral reefs than residents of other counties.
Key Takeaways

- Coral reefs are important to South Florida’s culture and tourism, and many (in Monroe County) rely on local reefs for seafood.
Residents in 2019 were more familiar with marine resources and how conditions are changing.

Overall outlook: resources are becoming worse, and the most serious issues are water quality, climate change, and coral abundance.
Key Takeaways

- The majority of Monroe County residents were familiar with MPAs, but awareness among residents of Martin, Miami-Dade, Palm Beach, and Broward counties tended to be low.

- Residents of all counties generally supported the establishment of MPAs, and agreed that MPAs protect coral reefs. But there was less agreement on whether there should be more MPAs.
Key Takeaways

❖ Overall, residents are receptive to management strategies specific to improving water quality and restoring corals.

❖ This indicates that managers can more confidently suggest implementing those initiatives to support coral reef health.

❖ At the same time, those options may have differing impacts to different subgroups/stakeholders.
Residents strongly supported more public education on sea level rise and climate change.
Next steps for this collection

- Partner review of report
- Revisions and external peer review
- Partner review of infographic
- Publication of report and infographic
- Indicator scores will be recalculated at the end of current monitoring cycle
Next monitoring cycle

- Survey improvements
- New clearance process – In 2023, we’ll start partner engagement for next round
- Monitoring round 3 scheduled for 2025-2026
Thank you!

For more information, please contact:

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http://www.coris.noaa.gov/activities/projects/ncrmp_socio